## **CLAIMS**

5

15

- 1. Use of P-CABs in the treatment of sleep disturbance due to silent gastro-esophageal reflux.
- 2. Use of P-CABs for the treatment of patients who are suffering from sleep disturbance due to silent gastro-esophageal reflux.
- 3. Method for the treatment of sleep disturbance due to silent gastro-esophageal reflux consisting in that an effective amount of a P-CAB is administered to a patient who needs such a treatment.
  - 4. Use of P-CABs for the production of medicaments for the treatment of sleep disturbance due to silent gastro-esophageal reflux.
  - 5. Pharmaceutical preparation for the treatment of sleep disturbance due to silent gastroesophageal reflux, containing a P-CAB as active compound together with a pharmaceutically acceptabler diluent or carrier.
- 6. Pharmaceuticle preparation according to claim 5 suitable for immediate-release.
  - 7. Pharmaceutical preparation according to claim 5 suitable for modified release.
- 8. P-CAB as mentioned in anyone of claims 1-7, wherein the P-CAB compound is a compound of Formula I

or a pharmaceutically acceptable salt thereof, and

 $R^{1}$  is

5

10

15

(a) H,

(b) CH<sub>3</sub>, or

(c) CH<sub>2</sub>OH;

R<sup>2</sup> is

(a) CH<sub>3</sub>

(b)  $CH_2CH_3$ 

 $R^3$  is

(a) H

(b) C<sub>1</sub>-C<sub>6</sub> alkyl,

(c) hydroxylated C<sub>1</sub>-C<sub>6</sub> alkyl

(d) halogen

 $R^4$  is

20 (a) H,

(b) C<sub>1</sub>-C<sub>6</sub> alkyl,

(c) hydroxylated C<sub>1</sub>-C<sub>6</sub> alkyl, or

(d) halogen;

 $R^5$  is

(a) H, or

- (b) halogen;
- R<sup>6</sup>, R<sup>7</sup> are the same or different
  - (a) H,
  - (b) C<sub>1</sub>-C<sub>6</sub> alkyl;
  - (c) hydroxylated C<sub>1</sub>-C<sub>6</sub> alkyl
    - (d) C<sub>1</sub>-C<sub>6</sub> alkoxy-substituted C<sub>1</sub>-C<sub>6</sub> alkyl

X is

10

15

25

30

- (a) NH, or
- (b) O;

or pharmaceutically acceptable salt thereof.

- 9. P-CAB as mentioned in anyone of claims 1-7, wherein the P-CAB compound is a compound of Formula I and  $R^1$  is  $CH_3$  or  $CH_2OH$ ;  $R^2$ ,  $R^3$  and  $R^4$  independently are  $CH_3$  or  $CH_2CH_3$ ;  $R^5$  is H, Br, Cl, or F and  $R^6$ ,  $R^7$  are the same or different and chosen from a group consisting of H,  $C_1$ - $C_6$  alkyl, and hydroxylated  $C_1$ - $C_6$  alkyl; or a pharmaceutically acceptable salt thereof.
- 10. P-CAB as mentioned in anyone of claims 1 7, wherein the P-CAB compound is a compound selected from a group consisting of 8-(2-ethyl-6-methylbenzylamino)-3-hydroxymethyl-2-methylimidazo[1,2-a]pyridine-6-carboxamide,
  - 2,3-dimethyl-8-(2,6-dimethylbenzylamino)-N-hydroxyethyl-imidazo[1,2-a]pyridine-6-carboxamide,
  - 2,3-dimethyl-8-(2-ethyl-6-methylbenzylamino)-imidazo[1,2-a]pyridine-6-carboxamide,
    - 8-(2-ethyl-6-methylbenzylamino)-N,2,3-trimethylimidazo[1,2-a]pyridine-6-carboxamide,
      - 2,3-dimethyl-8-(2,6-dimethylbenzylamino)-imidazo[1,2-a]pyridine-6-carboxamide,
  - 2,3-dimethyl-8-(2-ethyl-4-fluoro-6-methylbenzylamino)-imidazo[1,2-a]pyridine-6-carboxamide,
    - 2,3-dimethyl-8-(2,6-dimethyl-4-fluoro-benzylamino)-imidazo[1,2-a]pyridine-6-carboxamide,

10

20

25

- 2,3-dimethyl-8-(2,6-diethylbenzylamino)-imidazo[1,2-a]pyridine-6-carboxamide,
- 2,3 dimethyl-8-(2-ethyl-6-methylbenzylamino)-N-hydroxyethyl-imidazo[1,2-a]pyridine-6-carboxamide, and
- 2,3 dimethyl-8-(2-ethyl-6-methylbenzylamino)-N-(2-methoxyethyl)-imidazo[1,2-a]pyridine-6-carboxamide, or a pharmacologically acceptablel salt thereof.
  - 11. P-CAB as mentioned in anyone of claims 1-7, wherein the P-CAB compound is in the form of hydrochloride or mesylate salt.
- 12. Use of reversible proton pump inhibitors in the treatment of sleep disturbance due to silent gastro-esophageal reflux.
- 13. Use of reversible proton pump inhibitors for the treatment of patients who are suffering from sleep disturbance due to silent gastro-esophageal reflux.
  - 14. Method for the treatment of sleep disturbance due to silent gastro-esophageal reflux consisting in that an effective amount of a reversible proton pump inhibitors is administered to a patient who needs such a treatment.
  - 15. Use of reversible proton pump inhibitors for the production of medicaments for the treatment of sleep disturbance due to silent gastro-esophageal reflux.
  - 16. Pharmaceutical preparation for the treatment of sleep disturbance due to silent gastroesophageal reflux, containing a reversible proton pump inhibitors as active compound together with a pharmaceutically acceptabler diluent or carrier.
    - 17. Pharmaceuticle preparation according to claim 16 suitable for immediate-release.
- 18. Pharmaceutical preparation according to claim 16 suitable for modified release.

5

19. Reversible proton pump inhibitor as mentioned in claims 12-18, characterized in that it is soraprazan